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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,074	10/10/2001	Kyung-Hwan Kim	P56509	4796

7590 02/28/2006  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER

BOLLINGER, DAVID H

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/973,074	KIM, KYUNG-HWAN	
	Examiner	Art Unit	
	David H. Bollinger	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-19, 21-26, 38, 57-63 and 65-69 is/are rejected.
- 7) ☒ Claim(s) 2-6, 20, 27-37, 39-56, 64 and 70-81 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11, 12, 66 and 67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 11 and 66, it is not understood how the switching unit is moved backward and forward as claimed since no structure for causing such movement has been positively recited.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7 through 10, 13, 14, 16, 17, 19, 21 through 26, 38, 57 through 61, 63, 65 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota et al.

See Figures 10, 19 and 20 which show a signal generating unit comprising a movable plate 35 interlocked with a media aligning guide mounted on a cassette so as to interact with a switching unit (shown in Fig. 10).

5. Claims 1, 7 through 10, 13 through 17, 19, 21 through 24, 38, 57, 61, 63, 65, 68 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese 5-278866 A document.

See Figures 2, 3 and 10 which show a signal generating unit 17 cooperating with a switching unit 25.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al in view of the Japanese 5-278866 A document.

Ota et al as interpreted above in paragraph 4 teaches everything except the orientation of the detachably mounted cassette to feed the sheets in a second direction perpendicular to a first direction for mounting of the cassette in the main body.

The Japanese 5-278866 A document teaches that the mounting direction of a removable cassette may be arranged so that the feed direction of the sheets from the cassette is perpendicular to the mounting direction.

It would have been obvious to one of ordinary skill in the art to provide for a mounting direction of the Ota et al cassette such that the feed direction of the sheets therefrom is perpendicular to the mounting direction in view of the teachings of the Japanese 5-278866 A document. This is considered the substitution of one known mounting arrangement for another and it is with the skill of one having ordinary skill to mount the cassette in a convenient manner.

8. Claims 18 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al in view of Taniguchi et al.

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Ota et al as interpreted above in paragraph 4 teach everything except the use of photo sensors in the sensing unit.

Taniguchi et al teaches employing photo sensors to detect the position of the a sensing element indicating the media size in a cassette (see Figure 6A).

In view of the teachings of Taniguchi et al, it would have been obvious to one of ordinary skill in the art to employ photo sensors to detect the position of the switching elements of Ota et al to indicate the media size positioned in the cassette. This is considered the substitution of one know sensing arrangement for another.

9. Claims 11, 12, 66 and 67 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

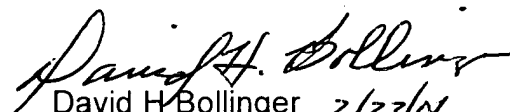
10. Claims 2 through 6, 20, 27 through 37, 39 through 56, 64 and 70 through 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Bollinger whose telephone number is 571-272-6935. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David H. Bollinger 2/23/08  
Primary Examiner  
Art Unit 3653